



stormwater Connections

from raindrop to river



Published by the City of Eugene Stormwater Management Program

Spring 2012

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Native Plant Nursery Enriches Plantings at Parks and Natural Areas



Located in Alton Baker Park next to the Community Garden, the City of Eugene's Native Plant Nursery (NPN) strives to enhance the diversity of native plant communities within City of Eugene parks and natural areas. The nursery produces native seed and plant material and offers the community an opportunity to learn about the value of native plants through volunteer activities.

In 2011, the NPN's inventory included more than 50 species of native forbs, grasses, shrubs, and trees adapted to upland, riparian and wetland habitats. In 2011, just over 31 pounds of seed was produced and the total number of potted plants exceeded 2,600.

So where do all the plants and seeds go? In 2011, twelve City-owned natural areas received plant material from the NPN. The following sites or projects received seeds or potted plants or both:

Delta Ponds	Hendricks Park
Mariposa Woodlands	Ridgeline Trail
Owen Rose Garden	Spring Creek at Awbrey Park
Tugman Park	West Eugene Wetlands
Whilamut Natural Area Butterfly Meadow	
Whilamut Natural Area Woodland	
Willamette River at Greenway Knoll	
Willamette River at Heron Slough	

The success of the NPN depends on dedicated volunteers and interns that help keep the nursery running. In an average year, 50 volunteers contribute around 750 total hours of planting, propagating and seed collecting.

If you would like to learn more about the NPN, come to the open house on May 12 at 10 a.m. or contact Lauri Holts, Natural Resources Coordinator at 541-682-4925 or lauri.j.holts@ci.eugene.or.us. If you are interested in volunteering, please contact Katie Blair, Volunteer Coordinator at 541-682-4831 or katie.a.blair@ci.eugene.or.us. 💧



Spring is the Season for Earth-friendly Events!

Get outside and join us for the following activities that promote a safe and healthy planet:

Earth Day

April 21, 11 a.m. to 5 p.m.

EWEB River's Edge Plaza, Free

Great live music, booths, activities, book sale, John H. Baldwin Film and Lecture Series, and Lane County Master Gardeners' plant sale.

Visit earthdayoregon.com for more details.

LRAPA Vehicle Emission Testing

April 21 & 22, 10 a.m. to 5 p.m.

Valley River Center west parking lot

This free diagnostic test takes five minutes and drivers will receive a printed report and a coupon from a local EcoBiz-certified repair shop for 50 percent off advanced diagnostics and 10 percent off any needed service or repairs. For more information about this event or to learn more about air quality in our region, visit lrapa.org

Plantapalooza! (see article on page 2)

May 12, 9 a.m. to 2 p.m.

Alton Baker Park, main shelters and Leisure Lane

Public Works Day (see page 8)

May 17, 8:30 a.m. to 3 p.m.

1820 Roosevelt Boulevard 💧

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Plantapalooza!

Come celebrate the uses of plants in our everyday lives, from growing vegetables and flowers in our gardens and using water-wise plants in our landscapes to restoring native plant populations in Eugene’s natural areas. May 12, from 9 a.m. to 2 p.m., come to Alton Baker Park main shelters and Leisure Lane for open houses, tours and activities for gardeners of all ages.

THE OREGON PLANT FAIR Presented by Avid Gardeners and the Willamette District Garden Clubs. This plant-shopping event is at the main shelters from 9 a.m. to 2 p.m. An annual convergence of specialty plant growers and garden artists from all over Oregon offers everything from fabulous new plant varieties to familiar old favorites, as well as distinctive and imaginative garden artworks. See avidgardeners.org for more information.

THE BUTTERFLY MEADOW RESTORATION PROJECT Walama Restoration Project has been restoring this three-acre site since 2005. This work has converted a weedy field into a beautiful meadow with over 25 species of native wild flowers. Join the group to plant more wildflowers at 9:30 a.m., or take the tour at 10:30 a.m. to learn why the restoration of this meadow is so important. For more information call 971-235-3693.

MIGHTY MAMAS NATURE QUEST Celebrate Mother’s Day with a family-paced nature adventure with Nearby Nature at 10 a.m. Learn about mammas in nature—from birds and bees to beavers! Free for members, \$2/person, or \$5/family for non-members. Pre-registration required: 541-687-9699.

NATIVE PLANT NURSERY (see cover article) Open house at 10 a.m. and tour at noon. Come learn how native plants and seeds are produced. For more information call 541-682-4925.

WATER WISE LANDSCAPE DEMONSTRATION GARDEN Informational tours from 10 a.m. to noon. Visit this special garden designed to showcase strategies to reduce water use, incorporate native, edible and low water use plants, and capture and treat storm water. This product of community collaboration features a water-saving landscape design, a rain garden, a vegetated swale, a 3,000-gallon rainwater cistern, and smart irrigation. 💧



Plantapalooza! Activities

9 a.m. Oregon Plant Fair opens (at main shelters)

9:30 a.m. Butterfly Meadow Restoration work party

10 a.m. Mighty Mamas Nature Quest

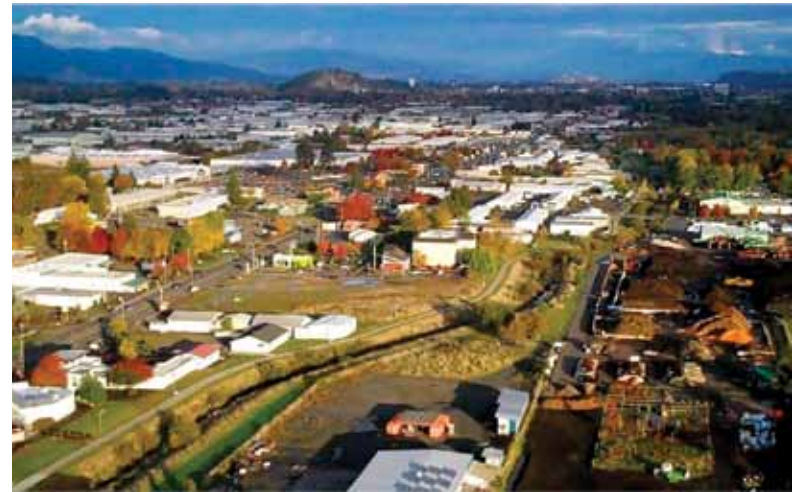
Native Plant Nursery Open House begins

Water Wise Garden Tours begin

10:30 a.m. Butterfly Meadow Restoration Tour

Noon Native Plant Nursery tour

Wildflowers (top), plant starts (center) and the Water Wise Garden (right) are all part of Plantapalooza! at Alton Baker Park on May 12.



*Amazon Creek along West 11th Avenue near Bailey Hill Road.
Photo courtesy of RaptorViews*

Amazon Creek Initiative Aims to Improve Water Quality

The Long Tom Watershed Council (LTWC) sees Amazon Creek as an essential community amenity for Eugene. The creek serves important functions for flood protection and water quality preservation. It is also home to many native species of fish and wildlife, serves as important habitat for endangered and threatened species, and provides recreational opportunities for all.

The LTWC has built a unique partnership called the “Amazon Creek Initiative” with the City of Eugene, local businesses and agriculture producers, and state and federal agencies including Oregon Department of Environmental Quality, Department of Agriculture, and the Environmental Protection Agency to improve water quality and habitat conditions in Amazon Creek.

The Amazon Creek Initiative began in the summer of 2011 by monitoring for pesticides in the creek. As the data becomes available, the LTWC will share this information with the public, and work with local pesticide retailers and applicators to reduce the level of toxins entering our waterways. LTWC can do this by offering free trainings on pesticide use and finding alternatives when appropriate. LTWC will also be encouraging local businesses to voluntarily incorporate rain gardens, bioswales, and stormwater planter boxes for onsite stormwater treatment. In these ways, local businesses can do their part to help improve water quality and establish conditions in Amazon Creek that could support native cutthroat trout. Imagine—cutthroat trout in downtown Eugene!

To find out ways that you can participate in the Amazon Creek Initiative, contact Jason Schmidt, Urban Watershed Restoration Specialist with the Long Tom Watershed Council: 541-338-7042 jschmidt@longtom.org. This article was contributed by Jason Schmidt. 💧

Paint Stewardship: Decisions Beyond Color and Finish



This time of year, many homeowners dig out the brushes, rollers and drop cloths for a painting project in or around the house. Deciding on a color may be difficult enough, but an equally important decision will be calculating the amount of paint you will need to use and what to do with any leftovers.

Here are some tips for paint stewardship provided by the

PaintCare recycling website at paintcare.org.

- Save money: By buying the right amount of paint, you'll save money (and storage space in your garage or shed).
- Save the environment: The less paint you have left over at the end of your project, the less likely it is to find its way into the landfill.
- Avoid exposure to toxics: If you need to use oil-based paint for a project, remember that it is ignitable and can be hazardous to children. If you don't use these up completely, take them to a PaintCare collection center (below) or go to the Lane County Household Hazardous Waste Collection Center to dispose of them.

The PaintCare program is a national paint recycling initiative that was piloted in Oregon in 2010. Local hardware stores and paint stores participate in collection of leftover paints for reuse, recycling, energy recovery, or safe disposal. Eugene-area collection locations include Jerry's (both locations), Forrest Paint, Tommy's Paint Pot, and Sherwin Williams on Green Acres Road. ♦

Spring Cleaning Reminder

If disposing of odds and ends of materials in your garage is one of your spring cleaning plans, here's a simple solution from Lane County. Paint and other hazardous waste (pesticides, fertilizers, poisons, acids, batteries and pool chemicals to name a few) may be dropped off at Lane County's Household Hazardous Waste Collection Center in Glenwood. Residents can drop off waste free of charge by appointment only on Thursday mornings or on two Saturdays each month. Call 541-682-3111 during business hours Monday through Friday to schedule an appointment. Learn more at lanecounty.org/Departments/PW/WMD/HazWaste ♦

Is Your Auto Shop Eco-Logical?

The Eco-Logical Business (EcoBiz) Program for Automotive Repair shops recognizes businesses that reach the highest standards in minimizing their environmental impact. Businesses must meet all environmental regulations and take extra voluntary steps to reduce water, energy, and material consumption, prevent water and air pollution, and reduce the generation of hazardous and solid waste. EcoBiz shops receive a site visit to ensure compliance with regulations. The shops also implement best management practices for unregulated activities.

You can choose an EcoBiz shop the next time you need to have your car repaired or serviced, or you can encourage your own auto repair shop to become certified. The EcoBiz program is supported by the City of Eugene and other member agencies of the Lane Pollution Prevention Coalition.



These Eugene Auto Shops have received EcoBiz Certification

North Eugene Automotive LTD	1048 River Rd., 541-688-1917
Old Dominion Collision	1060 W. 6th Ave., 541-485-3368
Stadium Automotive	2025 Franklin Blvd., 541-343-5050
Sun Automotive (2 locations)	391 Rustic Ave. 1905 Agate St. 541-344-2219 541-344-0869
Swedish Engineering West	900 McKinley St., 541-685-0830
Wayne's Garage	27 E. 27th Ave., 541-342-3941
A & M Autobody Collision Repair Center	430 W. 1st Ave., 541-686-2915
Autohaus	1502 W. 7th Ave., 541-683-5050
Euro-Asian Automotive	1917 Franklin Blvd., 541-485-8226
Mac's Radiator & Repair Inc.	2270 W. 11th Ave., 541-344-0253

For more information about the Eco-Logical Business program or to locate other shops near you, visit lanep2c.org ♦

Planning a Benefit Car Wash? Choose our stormwater-friendly kit for your fund-raising event

Borrow our free, fish-friendly car wash kits that keep soap suds out of storm drains and rivers. To learn more, check out our online video at happyivers.org. To reserve a kit, call 541-682-4929 in Eugene or 541-726-3694 in Springfield.



Sharing Food Waste in Collective Compost Bins

Do you want to do the right thing by composting your food scraps, but find your compost pile becomes a stinky mess every time you try? The answer might be right next door or just down the block. If you have an avid gardener in your neighborhood and an interest in a fun-for-all-ages project, a cooperatively managed compost system might be just what you need.

Several examples exist in Eugene, where neighbors have created composting opportunities for those that want to divert scraps from the landfill, but can't or don't want to compost in their own yards.

River House hosts one of Eugene's first community compost locations. Set up more than ten years ago as an educational display, this site showcases a variety of compost bins as well as a simple pallet bin for neighbors to use. It is an easy dump and cover system maintained by City of Eugene staff.

The same idea was taken up a notch by Eugene's Friendly Farmer Common Ground Garden group. With start-up funding from the Neighborhood Matching Grants program, they built a three-bin compost system for neighbors to dump and cover their food scraps. The scraps are covered by sawdust, leaves and wood chips made available by garden volunteers. Volunteers also turn the compost as the first bin fills, typically every three months. When the first bin is full, compost is turned into the second bin, and finally the third. Clear signage explains the process and finished compost feeds the neighborhood garden, which in turn produces food for local families.

This year marks the second year this system has been in place. Neighbor Jane Griner shares "this system is so easy to use. Even my granddaughter likes to use it. Her job is to cover the food scraps with the sawdust. I'd much rather see my food scraps feed the neighborhood garden than end up in the landfill. It feels great knowing I'm contributing to the garden in such a simple way."

The key to acceptance is to keep the site tidy so it doesn't become a visual nuisance in the neighborhood or attract unwanted critters. Sunday morning is a favorite time to use the site and sometimes a line forms as neighbors wait their turn to compost food scraps and do a good deed for the planet.

Besides, you never know who you might meet at the neighborhood compost bin! ♦



Like to learn more about composting?

Attend a free compost workshop this spring sponsored by the City of Eugene and OSU/Lane County Extension Service.

For beginning to experienced composters, these hands-on workshops cover the basics of how composting works, which materials to use, and the different methods and types of compost bins available. Workshops are led by knowledgeable backyard composting information specialists. Pre-registration is not required.

Saturday, April 28 10 a.m. – noon

River House, 301 N. Adams, Eugene

Saturday, May 19 10 a.m. – noon

GrassRoots Garden, 1465 Coburg Road, Eugene

Saturday, June 2 10 a.m. – noon

River House, 301 N. Adams, Eugene

For more information on other composting workshop dates and locations and more vermiculture ideas, visit: extension.oregonstate.edu/lane/gardens or call the Master Gardener hotline at 541-344-0265. ♦

Why Compost?
Recycling organic waste from a household into compost returns valuable organic matter to the soil and keeps it out of the landfill.

A 2010 Department of Environmental Quality waste composition study found that 18 percent of trash going to Short Mountain Landfill is food waste. Another four percent is yard debris. That's almost one quarter of our garbage that could have been turned into inexpensive fertilizer for lawns, gardens and houseplants.





Vermicompost: advanced processing involves hundreds of very small co-workers

Worm composting, or verimicompost, happens naturally when red wigglers find their way to organic waste in the garden. By building or purchasing a special flow-through worm bin, gardeners can harvest the natural by-product of this process, worm castings, as they are produced. Worm castings are an excellent top dressing for the yard or garden as they contain nitrogen along with valuable micronutrients and minerals.

Many people interested in vermicompost are unsure about locating worms. While they can be purchased at some garden centers and by mail order, the OSU extension website offers the following advice for those willing to dig a little:

Red wiggler or composting worms naturally colonize debris piles in most gardens. Check the bottom of a leftover compost pile, decaying leaf piles or animal manure piles (such as horse, alpaca or chicken). You may also ask a friend to let you scavenge their compost pile for a handful of worms. It doesn't take many red wigglers to get a worm bin going—they will double their population in 60 days. Do not use nightcrawlers. They will not survive in a worm bin. 💧



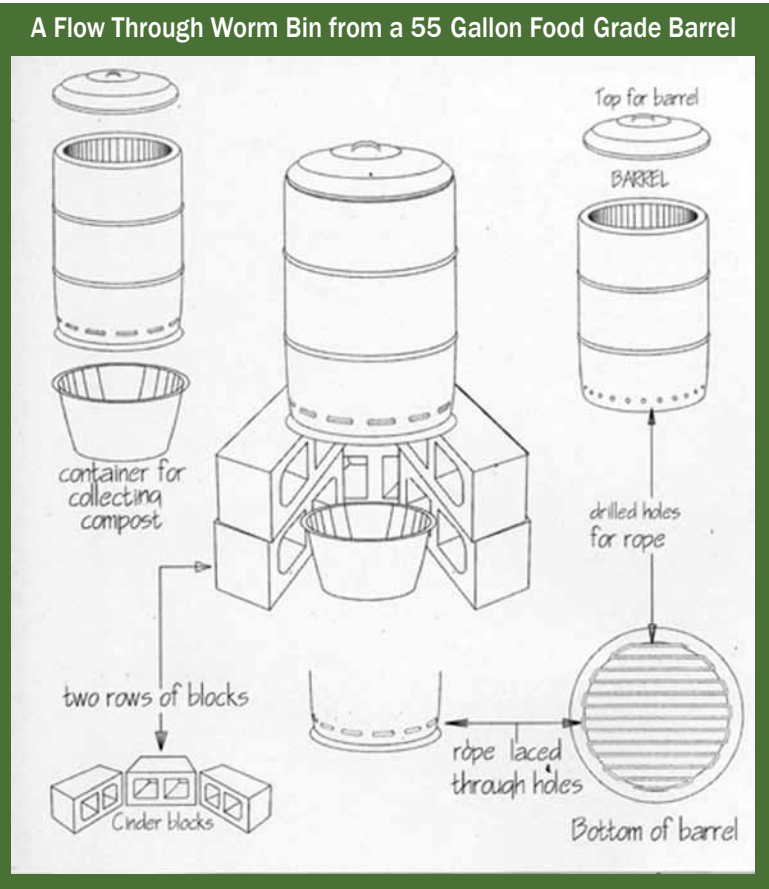
End of Leaf Season Final Tally

Eugene’s 11-week leaf collection program ended January 20. Approximately 17,700 cubic yards were collected by loaders and leaf vacuums. Three leaf crews canvased the City’s streets twice, beginning with improved streets on the first pass and finishing all streets on the second go-round. Heavy winds in late December amplified the volume of street leaves, extending the second-round collection by one week.

All of the collected leaves were reused or recycled. Residents received nearly 8,000 cubic yards of leaves through Public Works Maintenance’s leaf delivery program. The remaining leaves were deposited at community gardens and local commercial recyclers. No leaves were sent to the landfill.

At the end of leaf collection season, rainstorms brought nearly seven inches of rain down on the Eugene area (January 18-25). Thanks to the leaf collection program, rainwaters flowed freely into storm drains with only a handful of high water calls needing service.

If you still have a stray leaf pile in your yard, consider it a head start for next year! Add some grass clippings and any extra soil you have left over after spring planting, keep it moist (cover loosely with a tarp), turn a few times over the summer and in a year (or less) you should have a nice top dressing to tuck around your perennials or add to your vegetable garden. 💧



Compost barrel plan by Ginny Ducale, courtesy Lane County Extension Service



Stormwater Connections is published by the City of Eugene Public Works Department to enhance awareness of stormwater and related surface water management issues.

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Editing and Design: Jeffrey Jane Flowers

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541-682-2739

wetlands & waterways



Crews from the natural resources section of parks and open space work throughout the year to restore and monitor wetland habitat at Coyote Prairie North Mitigation Bank.



Coyote Prairie Mitigation Bank Supports Wetland Restoration

The U.S. Army Corps of Engineers and the Oregon Department of State Lands in FY11 formally approved the City's new Coyote Prairie North Mitigation Bank, which will be able to sell mitigation credits to offset impacts to wetlands in the southern Willamette Valley. This expanded service area is larger than the City's older bank, the West Eugene Wetlands Mitigation Bank, which was only able to sell credits to offset impacts within the urban growth boundary and airport.

Restoration work began at the 165-acre Coyote Prairie North Mitigation Bank in 2009 by removing non-native vegetation, replanting historic wetland prairie vegetation, modifying drainage patterns, and creating a series of shallow vernal pools to redirect water onto the wetland. The result so far has been impressive. Frogs, salamanders, and grassland birds are now thriving in the first phase of this large-scale, ecosystem-oriented project.

The City of Eugene operates the only public mitigation banks in the region. In addition to exceptionally high standards, there are many unique benefits of Eugene's publicly-owned mitigation bank, including:

- Enhanced air and water quality treatment for non-point source pollution.
- An interconnected system of wetland and riparian areas for flood control.
- A diverse array of native plants and animals, including endangered species, and a significant connected system of wildlife habitats.
- Access to large serene natural areas near Eugene for all citizens to connect with and enjoy.
- Educational and recreational opportunities in and along the wetlands and stream corridors.

For more information, contact Trevor Taylor, natural areas restoration supervisor, trevor.h.taylor@ci.eugene.or.us or 541-682-4888. ♠



Biologists use a backpack electrofishing device to monitor salmon and other fish in Heron Slough.

Build It and They Will Come *Juvenile Chinook Salmon Found at Delta Ponds and Heron Slough*

For the first time in more than 60 years, juvenile spring Chinook salmon can swim freely through newly created side channels of the Willamette River at Delta Ponds and Heron Slough. With the completion of major restoration work this past year, water can now flow through the ponds for 2.2 miles, before it meanders back into the river. Across the river from Delta Ponds is Heron Slough, a quarter mile of newly constructed stream-like side channel where river water can also flow during high water events like Eugene has experienced during the past winter.

Slow-moving side channels such as those recently restored at Delta Ponds and Heron Slough provide areas of calm water during high winter flows. Here juvenile salmon are able to rest, feed, and grow larger before migrating to the ocean. Although the Delta Ponds and Heron Slough projects provide benefits to multiple wildlife species, both projects were designed specifically to provide overwintering habitat for juvenile Chinook salmon.

A grant from the National Oceanic and Atmospheric Administration (NOAA) Restoration Center has allowed the City of Eugene to hire a consultant to monitor fish in Delta Ponds and Heron Slough. The consultant has been running a rotary screw trap at the inlet at Delta Ponds. Since January, over 50 juvenile Chinook have been captured and released using the rotary screw trap. A handful of Chinook were also found in the interior ponds at Delta Ponds and hiding under some submerged tree roots in Heron Slough. 💧

Would you like to help us improve water quality near your home or workplace?

The Eugene Park Stewards provide volunteer opportunities for individuals and groups to keep water clean by enhancing local streams, ponds and natural areas. Some of the ways you can help include:

- Lead a neighborhood cleanup to keep waste, trash and debris out of streams.
- Roll up your sleeves (with friends, neighbors or co-workers) and consider adopting a local park or stream.
- Join in a large bike path clean up along the river in July or volunteer with the Annual Great Willamette River Clean Up in October.
- Suggest a service-learning project at a local school that gets children involved in protecting water quality through hands-on action and learning.
- Contact Eugene Park Stewards about project ideas you have to help protect our water quality.

For more information about Eugene Park Stewards and upcoming projects in your neighborhood green space or favorite park, call 541-682-4844 or e-mail eugeneparkvolunteers@ci.eugene.or.us 💧



Volunteers assist with trail maintenance during part of the 2011 Ridgeline Celebration. Join us on May 5 for the 2012 event.

Upcoming Eugene Park Steward Events

Saturday, April 28

Ferndale Park,

Friends of Ferndale Park and local Eagle Scout, 9 a.m. to noon. Remove invasive ivy and blackberries and spread gravel in parking area.

Saturday, May 5

Awbrey Park Native Plant Tour and Celebration, Friends of Awbrey Park, 11 a.m. to 1 p.m. Tour the native plant communities that are reaching their peak bloom along the banks of Spring Creek.

Hays Tree Garden Donor Days, Alton Baker Park, 9 a.m. to noon. Come help prepare the garden for Mother's Day.

Second Annual Ridgeline Celebration, Obsidians, Disciples of Dirt and Friends of the Ridgeline, 9 a.m. to 3 p.m. Join us to celebrate one of Eugene's unique natural areas. Trail work, hiking, activities for kids, music, food and much more! 💧



educational page for kids of all ages!

Camas Lily is a Wetland Plant with a Long History



*camas bulb and
flower detail*

During the months of April through June in many open meadows you may notice a tall blue flower on a spiky stem rising above the grass. This is the flower of the camas lily, *Camassia quamash*, a plant that is native to the Pacific Northwest and that thrives in wet meadows and streamsides. Camas grows from a bulb that has adapted to these wet areas and is one of many plants that helps filter pollution from water that flows from land into waterways.

The camas bulb was an important food source for the Native Americans who originally lived in our region. Many tribes, including the Kalapuya of the Willamette Valley, collected the camas bulbs after they finished blooming by digging with a long two-pronged stick. The harvested bulbs were either prepared for storage as food, or split and replanted so they would multiply.

Fresh bulbs would rot in a short time, so they were roasted or air-dried for storage. Roasting was done in a pit oven and took one to two days. The flavor of the bulb was much sweeter after roasting and so it was used to enhance other less-sweet foods (just the way we use sugar). The Kalapuya sometimes cooked tarweed, *Madia elegans*, with the camas to add more flavor to the bulbs (Don't try this at home—there is a camas plant look-alike that has toxic bulbs!).

City of Eugene natural resource staff and volunteers plant camas as part of wetland and prairie restoration, and grow camas in the native plant nursery (see cover article). Some of the best places to see camas blooming in Eugene are along bike paths in the West Eugene Wetlands and in the Willamette Daisy Meadow (between Roosevelt Boulevard and West 11th near Terry Street).

(Resources include USDA Natural Resources Conservation Service Plant Guide. Learn more about conservation at nrcs.usda.gov)

*"the quawmash is now in blume. at a Short distance
it resembles a lake of fine clear water."
from William Clark's journal, June 12, 1806
about a field of camas in Idaho*

Join us for our annual **Public Works Day Open House**



Come take a behind-the-scenes look at the many ways public works serves our community. Learn more about parks and natural areas, the Eugene airport, wastewater, stormwater, engineering and maintenance. Special guests include the Eugene Police and Fire Departments.

**Thursday, May 17 from 8:30 a.m. to 3 p.m.
1820 Roosevelt Boulevard**

- Climb aboard and explore the big trucks
- Take part in hands-on activities geared for kids of all ages
- Meet stormwater ambassador Lily the frog
- Watch staff demonstrate the use of specialized equipment
- Learn about the history of Public Works in Eugene
- And more...

Convenient bus, van, and bicycle parking is available. LTD also has a bus stop right across from the yard's main entrance.

**For more information, visit www.eugene-or.gov/pwday or
call 541-682-4800.**



Camas blooming (foreground) at Tugman Park